ATTACHMENT A
Remarks

Claims 1-7 and 9-13 are pending in the present application. By this Amendment, Applicants have amended claims 1, 7, and 9, canceled claim 8, and added new claim 13. Applicants respectfully submit that the present application is in condition for allowance based on the discussion which follows.

Claim 7 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for reciting the raised regions extend circumferentially of the annular space for between 3° and 12° around the annulus and preferably in the order of 6°. By this Amendment, Applicants have amended claim 7 by deleting reference to the preferable 6° and adding new claim 13 which includes the now deleted subject matter of claim 7. Further, Applicants have amended claim 7 by replacing "for" with "from" so as to more clearly recite the raised portions extends from 3° to 12° around the annulus.

Applicants respectfully submit that claim 7, as currently amended, is in compliance with 35 U.S.C. § 112, second paragraph. As currently amended, claim 7 makes it clear that each raised portion extends circumferentially from 3° to 12° around the annulus. Thus, claim 7 recites a spacer with raised portions which extend from between 3° and 12° around the annulus. Accordingly, Applicants respectfully request that the rejection to claim 7 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claims 1-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tonneriux (French Document FR 2688037, hereinafter "Tonneriux") in view of Ashfield et al (hereinafter "Ashfield") or Wallace et al (hereinafter "Wallace"). With regard specifically to claim 8, the Examiner alleges that although Ashfield and Wallace do not disclose spacers having raised regions which extend from a planar surface 2% to 5% of

the thickness of the spacer, it would have been obvious to have raised regions extending 2% to 5% the thickness of the spacer so that the spacer accommodates the parts that will interact with it.

By this Amendment, Applicants have amended claim 1 to include the subject matter of claim 8. As a result, claim 1 now recites, in part, a spacer having raised regions on each planar face, each raised portion extending outwardly of the respective planar face by between 2% and 5% of the nominal thickness of the spacer between the planar faces.

The present invention as recited in claim 1 is not obvious in view of the prior art of record as the prior art fails to teach or suggest the claimed spacer having raised regions on each planar face, each extending outwardly of the respective planar face by between 2% and 5% of the nominal thickness of the spacer between the planar faces. The claimed extending 2% and 5% of the thicknesses of the spacer provides advantages and features not taught or suggested in the prior art of record. As disclosed in the present specification on page 6, the claimed extending percentage provides a maximum out-of-plane deformation of the spacer to be within a desirable tolerance so that movements between two parts of a machine to which the present spacer is disposed is achieved while providing for a constant clamping force to maintain a pre-loading on a bearing of the machine (see present specification, page 6, paragraph 4).

None of the prior art references of record teach or suggest a spacer having raised portions extending from 2% and 5% of the thickness of the spacer as claimed. Tonneriux has raised regions which project outwardly of the planar faces by about the

same thickness as the remainder of the spacer, i.e., 100% of the thickness. Ashfield, e.g., Figure 2, discloses raised portions which appear to be about 50% of the thickness of the spacer. The washer in Wallace has raised regions which as with the previously discussed references is very large in comparison to the 2% to 5% of the thickness the raised portion extend in the presently claimed invention. One negative consequence of having a relatively large raised portion disclosed in the prior art, i.e., extending from the surface of the spacer, in comparison to the thickness of the spacer, is that the spacer is likely to mark the faces of the parts between which the spacer is compressed.

Furthermore, contrary to the Examiner's allegation, it would not have been obvious to modify how far the raised portions of the prior art extends as the prior art fails to teach or suggest modifying how far their respective raised portions extend to extend the claimed 2% to 5% of the thickness of the spacer. Absent the present disclosure which discloses an advantage of having the claimed percentage is a maximum out-of-plane deformation is achieved, one of ordinary skill in the art would not be motivated to modify the prior art which discloses having raised portions which extend from between 50% to 100% the thickness to have the claimed 2% to 5%.

Moreover, Tonneriux teaches the use of a shaped memory alloy that expands the washer to a selected temperature thereby retaining an axial load. Conversely, the present invention is directed to a spacer intended as a high rate compact spring. Although Ashfield is directed to a high rate spring, it is only usable to provide its function when provided with a stack of individual springs. Conversely, the present spacer with claimed plurality of raised portions can be used between planar faces of machine elements as a single unit. Nowhere does Ashfield teach or suggest modifying its

disclosure from requiring a plurality of springs or spacers to a single spring spacer having the claimed raised portions. Furthermore, there fails to be any motivation or suggestion within the prior art of record to suggest modifying the amount the prior art's raised portions extend in combination with the remaining claimed elements to make the present spacer obvious.

With regard to claim 11, the aforementioned references of Tonneriux, Ashfield, and Wallace fail to disclose the claimed first and second machine elements, let alone, machine elements in combination with the claimed spacer. Therefore, Applicants respectfully submit that the prior art fails to make claim 11 obvious.

Based on the foregoing, Applicants respectfully submit that claims 1-11 are not obvious in view of the prior art of record and therefore respectfully request that the rejection to the claims under 35 U.S.C. § 103(a) be withdrawn.

Claims 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rampal in view of Tonneriux, Ashfield, or Wallace. Applicants respectfully submit that it would not have been obvious for one of ordinary skill in the art to combine the disclosures of Tonneriux, Ashfield, or Wallace with Rampal. There fails to be absolutely any teaching or suggestion to motivate one of ordinary skill in the art to substitute the spacer of Tonneriux, Ashfield, or Wallace for the one in the device of Rampal. Nowhere in these respective references is there any suggestion that a spacer of Tonneriux, Ashfield, or Wallace could be or should be substituted for the one of Rampal. Based on the foregoing, Applicants respectfully submit that claims 11 and 12 are not obvious in view of the aforementioned references.

In view of the foregoing, Applicants respectfully submit that the present application is in condition for allowance.

END REMARKS